

AMENDMENT TO THE CLAIMS

Please rewrite the pending claims and enter new claims as follows:

What is claimed is:

1. (Original) A method of querying number-range searches, comprising:
 - receiving a number-range search query having one or more number ranges, wherein at least one number range includes at least one boundary number;
 - generating an expression of one or more numerical index terms based on the boundary number, wherein at least one numerical index term includes information associated with an indexed number; and
 - identifying one or more documents containing indexed numbers that satisfy the expression.
2. (Original) The method of claim 1, wherein at least one numerical index term includes information indicative of a characteristic of at least one respective number.
3. (Original) The method of claim 1, wherein at least one numerical index term includes information indicating that a specified digit is the last non-zero digit of a respective number.
4. (Original) The method of claim 1, wherein at least one numerical index term includes information indicative of the sign of at least one respective number.
5. (Original) The method of claim 1, wherein at least one numerical index term includes information indicative of a number type associated with a respective number range.
6. (Original) The method of claim 1, wherein at least one numerical index term includes information indicative of at least one digit of an indexed number.
7. (Original) A method of indexing number ranges, comprising:
 - receiving a plurality of documents containing numbers;
 - for each number in at least a subset of the numbers in the plurality of documents, generating a plurality of numerical index terms for the number, wherein each of the numerical index terms includes information associated with the number; and
 - storing the numerical index terms in an index.

8. (Original) The method of claim 7, wherein a numerical index term of the plurality of numerical index terms includes information indicative of a characteristic of the number.

9. (Original) The method of claim 7, wherein a numerical index term of the plurality of numerical index terms includes information indicating that a specified digit is the last non-zero digit of the number.

10. (Original) The method of claim 7, wherein a numerical index term of the plurality of numerical index terms includes information indicative of the sign of the number.

11. (Original) The method of claim 7, wherein a numerical index term of the plurality of numerical index terms includes information indicative of a number type associated with the number.

12. (Original) The method of claim 7, wherein at least one numerical index term includes information indicative of at least one digit of the number.

13. (Currently amended) A computer-readable medium having stored thereon instructions which, when executed by a processor, cause the processor to perform the operations of:

receiving a number-range search query having one or more number ranges, wherein at least one number range includes at least one boundary number having one or more digits;

generating an expression of one or more numerical index terms based on the boundary number, wherein at least one numerical index term includes information associated with an indexed number; and

identifying one or more documents containing indexed numbers that satisfy the expression.

14. (Original) The computer-readable medium of claim 13, wherein at least one numerical index term includes information indicative of a characteristic of at least one respective number.

15. (Original) The computer-readable medium of claim 13, wherein at least one numerical index term includes information indicating that a specified digit is the last non-zero digit of a respective number.

16. (Original) The computer-readable medium of claim 13, wherein at least one numerical index term includes information indicative of the sign of at least one respective number.

17. (Original) The computer-readable medium of claim 13, wherein at least one numerical index term includes information indicative of a number type associated with a respective number range.

18. (Original) The computer-readable medium of claim 13, wherein at least one numerical index term includes information indicative of at least one digit of an indexed number.

19. (Currently amended) A computer-readable medium having stored thereon instructions which, when executed by a processor, cause the processor to perform the operations of:
receiving a plurality of documents containing numbers;
for each number in at least a subset of the numbers in the plurality of documents, generating a plurality of numerical index terms for the number, wherein each of the numerical index terms includes information associated with the number; and
storing the numerical index terms in an index.

20. (Original) The computer-readable medium of claim 19, wherein a numerical index term of the plurality of numerical index terms includes information indicative of a characteristic of the number.

21. (Original) The computer-readable medium of claim 19, wherein a numerical index term of the plurality of numerical index terms includes information indicative of the end of the number.

22. (Original) The computer-readable medium of claim 19, wherein a numerical index term of the plurality of numerical index terms includes information indicative of the sign of the number.

23. (Original) The computer-readable medium of claim 19, wherein a numerical index term of the plurality of numerical index terms includes information indicative of a number type associated with the number.

24. (Original) The computer-readable medium of claim 19, wherein at least one numerical index term includes information indicative of at least one digit of the number.

25. (Original) A search engine for querying number range searches, comprising:
a query encoder configured to receive a search query for a number range having at least one boundary number, wherein the query encoder is configured to generate an expression of one or more numerical index terms based on the boundary number, and wherein at least one numerical index term includes information associated with an indexed number; and

an index server coupled to the query encoder and configured to identify one or more documents containing indexed numbers that satisfy the expression.

26. (Original) The search engine of claim 25, wherein at least one numerical index term includes information indicative of a characteristic of at least one respective number.

27. (Original) The search engine of claim 25, wherein at least one numerical index term includes information indicating that a specified digit is a last non-zero digit of a respective number.

28. (Original) The search engine of claim 25, wherein at least one numerical index term includes information indicative of the sign of at least one respective number.

29. (Original) The search engine of claim 25, wherein the numerical index term includes information indicative of a number type associated with the number range.

30. (Original) The search engine of claim 25, wherein at least one numerical index term includes information indicative of at least one digit of an indexed number.

31. (Original) A search engine for indexing number ranges, comprising:
an indexer for receiving one or more documents containing one or more numbers, the indexer configured to generate a numerical index term for each number, wherein the numerical index term includes information associated with the number; and
a document index coupled to the indexer and configured to store the numerical index term.

32. (Original) The search engine of claim 31, wherein at least one numerical index term includes information indicative of a characteristic of an indexed number.

33. (Original) The search engine of claim 31, wherein at least one numerical index term includes information indicative of the end of an indexed number.

34. (Original) The search engine of claim 31, wherein at least one numerical index term includes information indicative of the sign of an indexed number.

35. (Original) The search engine of claim 31, wherein the numerical index term includes information indicative of a number type associated with an indexed number.

36. (Original) The search engine of claim 31, wherein at least one numerical index term includes information indicative of at least one digit of an indexed number.